

Work Order ID 162670***162670***162707 for cash
Page 1

Item ID: 647.1302

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: EC145 Cable Cutter Removable Provisions

Start Date: 6/8/2017 Start Qty: 2.00

2

Cust Item ID:

Required Date: 6/9/2017 Req'd Qty: 2.00

2

Customer:

Reference: SEE W/O 118392 COSTED

Approvals:

Process Plan:

Date: JUN 07 2017

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

647.1300

D

100

Document Control

0.00

100

DC

DOCUMENT CONTROL

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP 647.1302

MLS 17-06-07

DAS
28

2

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

SEE W/O 118392 COSTED

ADD 647.0112 X4 MISSING

B: 159844 X4

B140968 X4

2 DAS
28

JUN 07 2017

Work Order ID 162670

Wednesday, June 07, 2017 2:42:35 PM

162670

Page 2

Item ID: 647.1302 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: EC145 Cable Cutter Removable Provisions
Start Date: 6/8/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 6/9/2017 Req'd Qty: 2.00 ***2*** Customer:
Reference: SEE W/O 118392 COSTED

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00 0.06				2	DAS 28 9-89	JUN 07 2017	
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: <u>Fg102</u> Packaging Memo Identify and pack for shipping as per PPP 647.1302 Location: <u>Fg102</u>	0.00 0.00				2	DAS 28 9-89	JUN 07 2017	
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.20						17/6/12	

DAS
21
9-89

JUN 08 2017

Picklist Print

Wednesday, June 07, 2017 2:42:39 PM

Page 1
T

Work Order ID: 162670

162670

Parent Item: 647.1302

647 1302

Parent Item Name: EC145 Cable Cutter Removable Provisions

Start Date: 6/8/2017

Required Date: 6/9/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 12.10.05 NEW ISSUE DD VERF:JLM IPP
REV:B 13.07.17 AS PER REV B JLM VERIFIED BY:DD IPP REV:C
15.07.08 AS PER REV D DD VERIFIED BY:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.0112 *647 0112* Strut Bracket		Manufactured	No				Each	35.0000	**	4			

Location

Loc Qty

Loc Code

CCK106

35

159844

35

4x 8
4x 6140968 DAS
JUN 07 2017 6
9-89
4

Work Order ID 118392

August-01-14 1:28:11 PM

118392 ** SEE W/O 162670* Page 1

Item ID: 647.1302 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: EC145 Cable Cutter Removable Provisions
 Start Date: 8/01/14 Start Qty: 2.00 *?
 Required Date: 8/01/14 Req'd Qty: 2.00 *?
 Reference: REWORK PER ECN14-604 Cust Item ID:
 Customer:

Approvals: Process Plan: *[Signature]* Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
647.1300	C (ECN2)

100 Document Control 0.00
100 DOCUMENT CONTROL
 DC Memo 0.00
 Doc.Control -USB or Paperwork Photocopy bluefile & type labels per PPP 647.1302

110 Pick Kit 0.00
110 Memo 0.00
 Packaging ULL FROM STOCK:
 Packaging 1 X 647.1302 B104768
 1 X 647.1302 B91810
 REWORK PER ECN14-604
 ADD TO EACH KIT:
 4 X 647.0112 B *140968 X4*
159844 X4

2 *DAS 8-09* *DAS 28 9-09* **MAR 23 2016**

August-01-14 1:28:10 PM

1 183.92

647 1302

Required Qty: 2.00

Comments: IPP REV:A 12.10.05 NEW ISSUE DD VERF:JLM IPP
REV:B 13.07.17 AS PER REV B JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.0112		Manufactured	No				Each	3.0000		8			
647 0112									**				
Strut Bracket									JUN 07 2017	4x40968		DAS 8-89	MAR
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>	4x15984		DAS 28-89	
				CK106				3					
					110036			2					
					91264			1					
647.1302		Manufactured	No				Each	0.0000		2			
647 1302									**				
EC145 Cable Cutter Removable Provisions										10-17-16		p162670	DAS

List Lots

August-01-14 9:01:33 AM

Page 1 of 1

Criteria : Item ID: '647.1301', '647.1302' All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
647.1301 EC145 Cable Cutters	Main Warehouse FG109	104841	7/04/14	1.0000		QC21		118391
			Total:	1.0000				
647.1302 EC145 Cable Cutter Removable Provisions	Main Warehouse FG102	104768	7/04/14	1.0000		QC21		
	Main Warehouse FG102	91810	7/04/14	1.0000		qc21		118392
			Total:	2.0000				

ENGINEERING CHANGE NOTICE

DART AEROSPACE LTD

Date: 14.07.31	Job No.:	ADR Yes/No:	ADR Date:	ECN #: 14- 604
Product No.: 145-21, 206-21	Created By: KJ	Approved By: <i>[Signature]</i>		
Product Name: Cable Cutters	Checked By: <i>[Signature]</i>			

Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)
Director of Operations	Y	NF	
Production Manager / Coord.	Y	LL/MF	
Purchasing Coord.	N	MG/CL	
Production Engineering Coord.	Y	DD/JLM	<i>[Signature] 14.07.31</i>
Production Engineering Coord.	N	DL	
Customer Order Processing	N	RM/CC	

Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)
DQA / QA Coord.	Y	PS	
QC Coordinator	Y	ED	
Customer Support	N	SW/LM	
Customer Technical Support	N	MB/HS	
Marketing Manager	N	KO	
Sales Support Manager	N	NM	

Reason for Change:
Added dimension and tolerance (646.9700), revised BOM (647.1300)

Documents Affected:
Release 646.9700 Rev C1, 647.1300 Rev C2

IF APPLICABLE: NCR: _____ PAR: _____ CAR: _____ CIR: _____ URF: _____

PAPERWORK UPDATE ☐ PARTS MUST COMPLY ☒ PREVIOUS PARTS SATISFACTORY ☐

#	Quality Assurance Actions	Reqd	Resp	Notes	Complete
1	Notify Previous Customers	N			
2	Notify Eurocopter France	N			
3	Notify Augusta Westland	N			
4	Manufacturing Licensing Agreement Update	N			

#	Engineering Actions	Reqd	Resp	Notes	Complete
5	Required Documents/Drawings/Item ID's Under Review (URF)	N			
6	Update Master Document List (MDL)	N			
7	Update Document Record (DR)	N			
8	Update Product Compatability Matrix	N			
9	Notify TC / FAA of Change (eg. ICA, 8110-3)	N			
10					

#	Document Control Actions	Reqd	Resp	Notes	Complete
11	Move / Update Electronic Files / Design Journal	N			
12	Update Product Specification Files (Bluefiles)	N			
13	Update Approved/Preliminary Dwg PDF Files	Y	KJ		
14	Update Product Development Summary (STC applications)	N			
15	Update QSI 021 (TC/FAA STC) and/or STC Approval List	N			
16	Create/Update Parts / STC Database	N			
17	Update / Verify Airworthiness Release Certificate Database	N			
18	Create / Update Change Record Form / Item Card Database	N			
19	Create / Update Packaging Process Plan (PPP)	N			
20	Red Decals required on Packaging Process Plan (PPP)?	N			
21	Update Controlled Supplier Documents (Qpulse) Database	N			
22	Update Grey Project Binder / Electronic Project Folder	N			
23	Update D-Part / M-Drawing / DSI / DEO Master Binders	N			
24	Update "Royalty Paid to" attribute (Parts sold under Dart USA STC's)	N			
25					

Description / Action:

Update BOM's and Routes per drawing revisions

add 647.0112

ECN Verified & Complete: _____ Date: _____

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04485

SHEET 1 OF 1

DWG NO. 647.1300

REV: C

PREPARED BY J. SOTO

DATE: 04/04/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: EC 145 CABLE CUTTERS KIT

APPROVED BY:

ENGR

MFG

QC

EFF. NEXT ORDER

TRANSACTION CODES (TC):
 A-ADD C-CREATE
 R-REVISE D-DELETE

REASON: REVISED F/N 62.

ECR:

D-14-02

62	R	601.3008	2	2	2	2	INSERT	NAS1834C3-300	
F/N	TC	PART NUMBER	.1306	.1304	.1303	.1301	DESCRIPTION	MATERIAL	SPECIFICATION
			QTY						

DOCUMENTS EFFECTED:

☐ MDL
 ☐ INSTALL INSTRUCTIONS
 ☐ ICA
 ☐ FMS
 ☒ BOM

CHANGE CATEGORY

☐ MAJOR
 ☒ MINOR

DER REVIEW REQUIRED

☐ YES
 ☒ NO

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES: UNLESS OTHERWISE SPECIFIED

- 1 AFTER INSTALLATION, APPLY F/N 73 A/R TO FILL GAPS AND FILLET EDGES
- 2 APPLY F/N 74 TO FAYING SURFACES
- 3 AT CUSTOMERS OPTION, INSTALL F/N 77 BY MATCH DRILLING ONTO F/N 1
- 4 INSTALL FOR 647.1301, 647.1302.
- 5 INSTALL FOR 647.1304, 647.1305.
- 6 APPLICABLE WHEN EUROCOPTER P/N 145-250014.11 IS INSTALLED WITH EUROCOPTER CABLE CUTTER FIXED PROVISIONS.
- 7 APPLICABLE WHEN REPLACING EUROCOPTER P/N 145-250074.11

UNINCORPORATED ECN(S)

04485, 04592

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION: INC		INC
2	INITIAL RELEASE	08/05/09	P. BRAVO
3	INCORPORATED ECN 03043, 03030, 03048	01/25/11	P. BRAVO
4	INCORPORATED ECN 03039	07/05/13	P. BRAVO
5	INCORPORATED ECN 04059	08/13/13	P. BRAVO

13	13	13	13	26	647.1812	SHIM		
4	4	4	4	25	647.1910	CLIP		
1	1	1	1	24	647.1810	NOSE DOOR DOUBLER		
1	1	1	1	23	647.1818	NOSE DOOR SPACER		
2	2	2	2	22	647.1813	ANGLE		
1	1	1	1	21	647.1913	TEE		
1	1	1	1	20	647.1814	GUSSET, LH		
1	1	1	1	19	647.1815	GUSSET, RH		
1	1	1	1	18	647.1915	SUPPORT ANGLE		
2	2	2	2	17	647.2011	LOWER STRUT		
1	1	1	1	16	647.1914	BRACKET		
1	1	1	1	15	647.1816	SUPPORT, LH		
1	1	1	1	14	647.1817	SUPPORT, RH		
1	1	1	1	13	647.1912	BRACKET, LH		
1	1	1	1	12	647.1911	BRACKET, RH		
4	4	4	4	8	647.0112	STRUT BRACKET		
			1	10	647.2110	LOWER RAIL		
			1	9	647.2111	UPPER RAIL		
1	1	1	1	8	647.1610	WIPER DEFLECTOR, FWD		
1	1	1	1	7	647.1601	WIPER DEFLECTOR ASSY, AFT		
			2	6	647.1701	SKID DEFLECTOR ASSY		
1	1	1	1	5	647.3201	GROUNDING CABLE ASSY		
1	1	1	1	4	647.2201	CROSS ASSY		
1	1	1	1	3	647.1602	DOUBLER ASSY		
1	1	1	1	2	647.1402	CUTTER ASSY (LOWER)		
			1	1	647.1401	CUTTER ASSY (UPPER)		
					647.1306	FIXED PROVISIONS KIT U CHANNEL		
					647.1305	REMOVABLE PROVISIONS KIT U CHANNEL		
					647.1304	EC145 CABLE CUTTERS KIT L CHANNEL COMPATIBLE		
					647.1303	FIXED PROVISIONS KIT		
					647.1302	REMOVABLE PROVISIONS KIT		
					647.1301	EC145 CABLE CUTTERS KIT		
1306	1305	1304	1303	1302	1301	FIND #	PART #	DESCRIPTION
								MATL
								SPEC.

BOM Table(Restructured)

QTY	DESCRIPTION	DATE	APPROVED
NEXT ASSY (S)	APICAL INDUSTRIES	2608 TEMPLE HEIGHTS DR	OCEANSIDE, CA. 92056-3512 (760)724-5300
	EC145 CABLE CUTTERS KIT		
	647.1300		
	SCALE: NONE		

QTY	DESCRIPTION	DATE	APPROVED
NEXT ASSY (S)	APICAL INDUSTRIES	2608 TEMPLE HEIGHTS DR	OCEANSIDE, CA. 92056-3512 (760)724-5300
	EC145 CABLE CUTTERS KIT		
	647.1300		
	SCALE: NONE		